

1550 nm LASER DIODE MODULES
UNCOOLED MQW-FP LD WITH PIGTAIL

FL-5300 SERIES

FEATURES

- 2 1550 nm typical emission wavelength
- 2 High reliability, long operation life
- 2 High temperature operation without active cooling
- 2 Build-in InGaAs monitor

APPLICATION

Trunk Line, FitL

DESCRIPTION

FL-5300 series are designed for coupling a single mode optical fiber with 1550 nm MQW-FP uncooled laser diode. FL-5300 series are the best kits as light sources for telecom and datacom applications.

ELECTRICAL AND OPTICAL CHARACTERISTICS (T_C=25 °C)						
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{th}	Threshold Current	CW		12	15	mA
V _{OP}	Operating Voltage	CW, I _F = I _{th} +20mA		1.2	1.5	V
P _f	Optical Output Power Part No:FL-530X FL-531X FL-532X FL-533X	CW, I _F = I _{th} +20mA	0.2 0.5 1.0 2.0	- - - -	- - - -	mW
λ _c	Center Wavelength	CW, I _{th} +20mA	1520	1550	1580	nm
Δ λ	Spectral Width	CW, I _{th} +20mA, RMS (σ)			3	nm
t _r , t _f	Rise And Fall Times	I _F =I _{th} , I _{th} +20mA, 10~ 90%			0.3	ns
Δ P _f / P _f	Tracking Error	APC, -40~+85 °C	-	-	±1.0	dB
I _m	PD Monitor Current	CW, I _{th} +20mA, V _{RD} =1V	100			μ A
I _D	PD Dark Current	V _{RD} =5V			0.1	μ A
C _t	PD Capacitance	V _{RD} =5V, f=1MHz		10	15	pF

ABSOLUTE MAXIMUM RATINGS (T_C=25 °C)			
Symbol	Parameter	Ratings	Unit
P _o	Optical Output Power (530X/531X/532X/533X)	0.5/1.0/1.5/3	mW
V _{RL}	LD Reverse Voltage	2	V
V _{RD}	PD Reverse Voltage	10	V
I _{FD}	PD Forward Current	1.0	mA
T _{opr}	Operating Temperature	-40~+85	°C
T _{stg}	Storage Temperature	-40~+85	°C

